

## Refine Search

### Search Results -

Terms	Documents
L6 and decarboxy\$9	6

**Database:**  
US Pre-Grant Publication Full-Text Database  
US Patents Full-Text Database  
US OCR Full-Text Database  
EPO Abstracts Database  
JPO Abstracts Database  
Derwent World Patents Index  
IBM Technical Disclosure Bulletins

**Search:** L7  **Réfine Search**  
  

### Search History

**DATE:** Thursday, November 09, 2006 [Purge Queries](#) [Printable Copy](#) [Create Case](#)

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
side by side			result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ			
<u>L7</u>	L6 and decarboxy\$9	6	<u>L7</u>
<u>L6</u>	L5 and alcohol and catalyst	52	<u>L6</u>
<u>L5</u>	L2 and (560/\$ or 524/\$)	75	<u>L5</u>
<u>L4</u>	L3 and half	4	<u>L4</u>
<u>L3</u>	L2 and decarboxy\$7	8	<u>L3</u>
<u>L2</u>	tetrabromophthalic anhydride and 11	191	<u>L2</u>
<u>L1</u>	tetrabromophthalic ester or diester	59931	<u>L1</u>

END OF SEARCH HISTORY

## Hit List

---

First Hit

Search Results - Record(s) 1 through 6 of 6 returned.

---

1. Document ID: US 20050027139 A1

L7: Entry 1 of 6

File: PGPB

Feb 3, 2005

PGPUB-DOCUMENT-NUMBER: 20050027139

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050027139 A1

TITLE: Process for producing tetrabromobenzoate esters

PUBLICATION-DATE: February 3, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Bartley, David W.	West Lafayette	IN	US
Siebecker, James D.	West Lafayette	IN	US
Falloon, Stephen B.	Lafayette	IN	US

US-CL-CURRENT: 560/103

---

2. Document ID: US 5728760 A

L7: Entry 2 of 6

File: USPT

Mar 17, 1998

US-PAT-NO: 5728760

DOCUMENT-IDENTIFIER: US 5728760 A

TITLE: Use of ring-brominated benzoate compounds as flame retardants and/or plasticizers

---

3. Document ID: US 5728323 A

L7: Entry 3 of 6

File: USPT

Mar 17, 1998

US-PAT-NO: 5728323

DOCUMENT-IDENTIFIER: US 5728323 A

TITLE: Process for preparing dialkyl tetrahalophthalates

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMPC	Drawn D
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	---------

4. Document ID: US 5637757 A

L7: Entry 4 of 6

File: USPT

Jun 10, 1997

US-PAT-NO: 5637757

DOCUMENT-IDENTIFIER: US 5637757 A

**\*\* See image for Certificate of Correction \*\***

TITLE: One-pot synthesis of ring-brominated benzoate compounds

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMPC	Drawn D
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	---------

5. Document ID: US 5208366 A

L7: Entry 5 of 6

File: USPT

May 4, 1993

US-PAT-NO: 5208366

DOCUMENT-IDENTIFIER: US 5208366 A

TITLE: High yield method for preparation of dialkyl esters of polyhaloaromatic acids

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMPC	Drawn D
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	---------

6. Document ID: US 5049697 A

L7: Entry 6 of 6

File: USPT

Sep 17, 1991

US-PAT-NO: 5049697

DOCUMENT-IDENTIFIER: US 5049697 A

TITLE: High yield method for preparation of dialkyl esters of polyhaloaromatic acids

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMPC	Drawn D
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	---------

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
-------	---------------------	-------	----------	-----------	---------------

Terms	Documents
L6 and decarboxy\$9	6

Display Format: [-] [Change Format](#)

[Previous Page](#)    [Next Page](#)    [Go to Doc#](#)

FILE 'HCAPLUS' ENTERED AT 12:12:51 ON 09 NOV 2006

L1 669 S TETRABROMOPHTHALIC?  
L2 114 S L1 AND (ESTER OR DIESTER)  
L3 2 S L2 AND ALCOHOL AND CATALYST  
L4 103 S L2 AND PY<2003  
L5 0 S L4 AND DECARBOXY?  
L6 6 S L4 AND ALCOHOL

=> d 1-6 ibib abs hitstr

L6 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2001:352302 HCAPLUS  
DOCUMENT NUMBER: 134:353953  
TITLE: Esterification method for the manufacture of plasticizers for polymers  
INVENTOR(S): Buono, John A.; Cobb, Maryellen; Tao, Tao T.  
PATENT ASSIGNEE(S): Teknor Apex Company, USA  
SOURCE: U.S., 7 pp., Cont.-in-part of U.S. Ser. No. 199,691, abandoned.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6232427	B1	20010515	US 1999-470613	19991222 <-
WO 2001046311	A1	20010628	WO 2000-US34733	20001220 <-
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			US 1997-67970P	P 19971208
			US 1998-199691	B2 19981125
			US 1999-470613	A2 19991222

AB Methods of making halogenated aromatic esters useful as plasticizers are described. Polymer compns. including halogenated aromatic esters are also described. In one embodiment, the method includes contacting a tetrabromophthalate, an alc. and barium acetate.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1998:293751 HCAPLUS  
DOCUMENT NUMBER: 129:5285  
TITLE: Flame-retardant thermoplastic resin compositions and fireproofing agents of halogenated epoxy resins therefor  
INVENTOR(S): Takahashi, Yoshiyuki; Sato, Yuji  
PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10120874	A2	19980512	JP 1996-282266	19961024 <-
PRIORITY APPLN. INFO.:			JP 1996-282266	19961024

AB The compns., showing excellent heat stability and lightfastness, include halogenated epoxy resins whose epoxy groups are blocked with compds. having (i) active H and (ii) halogenated neopentyl skeleton in mols. The compns. may contain halogenated bisphenol-type epoxy resins (preferably

whose epoxy groups may be blocked with halophenol). The fireproofing agents of the halogenated epoxy resins are also claimed. Thus, PHT 4 (tetrabromophthalic anhydride) was esterified with equimolar tribromoneopentyl alc. (I) at 65° in DMF to give an ester, 0.50 mol of which was further reacted with 0.75 mol I at 70° in the presence of NaOH and repeatedly filtered and slurried with water to give a fireproofing agent showing blocking degree 75%, epoxy value 15.7 mg-KOH/g, Br content 56%, and softening point 110°. A specimen of the fireproofing agent 20, Cevian V 300 75, and ATOX S 5 parts showed UL 94 fire resistance rating V0 and color difference ( $\Delta E$ ) 4 in 100-h accelerated weathering test.

L6 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:740557 HCAPLUS

DOCUMENT NUMBER: 123:144817

TITLE: Thermal decomposition of ternary copolymers of ethylene with vinyl esters of halogen-containing acids and vinyl alcohol

AUTHOR(S): Belov, M. Yu.; Danilina, L. I.; Novikov, S. N.

CORPORATE SOURCE: Karpov Institute Chemical Physics, Moscow, 107064, Russia

SOURCE: Vysokomolekulyarnye Soedineniya, Seriya A i Seriya B (1995), 37(6), 1068-71

CODEN: VSSBEE

PUBLISHER: MAIK Nauka

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Thermal decomposition of the ternary copolymers of ethylene with vinyl esters of halogen-containing acids and vinyl alc., which are potential polymeric flame retardants, was studied. The measurements using thermogravimetry, gas chromatog., and IR spectroscopy showed that polymer decomposition proceeds through two stages involving, first, abstraction of side groups and, second, scission of backbone chains. Mechanisms of the formation of the major decomposition products were suggested. The correlation between chemical structure of the initial polymer, the yield of hydrogen halide, and the tendency of a polymer to crosslinking and carbonization upon pyrolysis was established.

L6 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:392455 HCAPLUS

DOCUMENT NUMBER: 123:34478

TITLE: Fire-resistant thermosetting resin compositions

INVENTOR(S): Nishibori, Setsuo; Kondo, Hideto

PATENT ASSIGNEE(S): Dai Ichi Kogyo Seiyaku Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

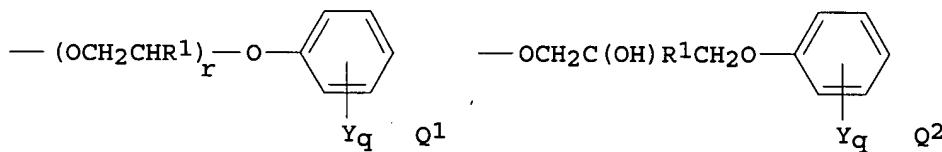
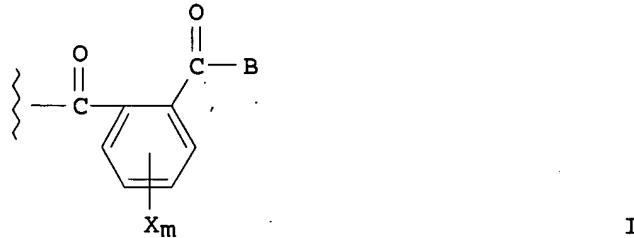
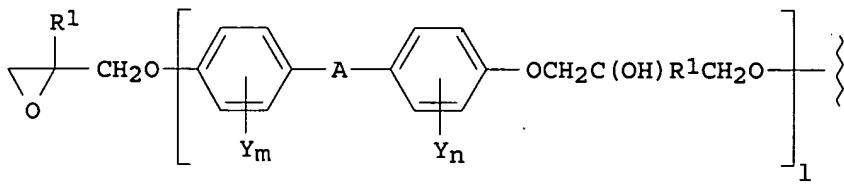
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06340817	A2	19941213	JP 1993-130305	19930601 <--
JP 3261596	B2	20020304		
PRIORITY APPLN. INFO.:			JP 1993-130305	19930601
GI				



AB The compns. with good heat resistance, processability, and storage stability contain epoxy resins I (A = CH<sub>2</sub>, SO<sub>2</sub>, O, CMe<sub>2</sub>; R<sub>1</sub> = H, Me; Y = Br, Cl, Me, H; X = Br, Cl; m, n = 1-4; l = 1.0-3.0; B = Q<sub>1</sub>, Q<sub>2</sub>, OCH<sub>2</sub>CR<sub>2</sub>R<sub>3</sub>R<sub>4</sub>, OCR<sub>2</sub>R<sub>3</sub>R<sub>4</sub>; r, q = 0-5; R<sub>2-4</sub> = H, Me, CH<sub>2</sub>Y). Thus, reacting equimolar amts. of tetrabromophthalic anhydride and tribromophenol-ethylene oxide (3 mol) adduct at 80° for 5 h in the presence of Et<sub>3</sub>N and further reacting the resulting ester with equimolar amount of tetrabromobisphenol A diglycidyl ether at 130° for 5 h gave a product, 20 parts of which was dissolved in MeOH containing 60 parts tung oil-modified phenolic resin and 10 parts cresyl di-Ph phosphate to give a varnish showing good storage stability at -20°. Paper impregnated with the varnish was laminated and pressed to give a test piece showing UL-94 fire resistance rating V-0 and good heat resistance, punching properties, and dimensional stability.

L6 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1989:535443 HCAPLUS

DOCUMENT NUMBER: 111:135443

TITLE: High yield methods for preparation of dialkyl esters of polyhaloaromatic acids as fire retardants for polymers

INVENTOR(S): Bohen, Joseph Michael; Mancuso, Anthony John

PATENT ASSIGNEE(S): Pennwalt Corp., USA

SOURCE: PCT Int. Appl., 81 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8902887	A2	19890406	WO 1988-US3256	19880921 <--
WO 8902887	A3	19900322		

W: AU, BB, BG, BR, DK, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO, SD, SU

RW: AT, BE, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR, NL,

SE, SN, TD, TG				
US 5049697	A	19910917	US 1988-244421	19880916 <--
AU 8827200	A1	19890418	AU 1988-27200	19880921 <--
AU 626819	B2	19920813		
EP 334951	A1	19891004	EP 1988-910425	19880921 <--
EP 334951	B1	19950412		
R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
BR 8807209	A	19891017	BR 1988-7209	19880921 <--
ES 2010608	A6	19891116	ES 1988-2869	19880921 <--
JP 02502018	T2	19900705	JP 1988-509511	19880921 <--
DD 282449	A5	19900912	DD 1988-319987	19880921 <--
HU 54339	A2	19910228	HU 1988-6807	19880921 <--
CA 1333178	A1	19941122	CA 1988-578019	19880921 <--
AT 121069	E	19950415	AT 1988-910425	19880921 <--
NO 8902003	A	19890518	NO 1989-2003	19890518 <--
NO 170147	B	19920609		
NO 170147	C	19920916		
FI 8902449	A	19890519	FI 1989-2449	19890519 <--
DK 8902441	A	19890718	DK 1989-2441	19890519 <--
US 5208366	A	19930504	US 1991-738992	19910819 <--
US 1987-99361 A 19870921				
US 1988-244421 A 19880916				
WO 1988-US3256 A 19880921				

PRIORITY APPLN. INFO.:

AB Title fire retardants are prepared by esterification of polybromo- or polychlorophthalic acid, polybromo- or polychlorobenzoic acids, or polybromo- or polychlorophthalic anhydride with alcs. in the presence of metal or organometallic compound as catalyst. A flame retardant [A; prepared by esterification of 0.5 mol tetrabromophthalic anhydride and 3.0 mol 2-(2-methoxyethoxy)ethanol with 2.32 g stannous oxalate and 200 mL xylene] 60 was molded with a mixture of PVC 100, dibasic lead phthalate 7, clay 10, bisphenol A 0.3, and wax 0.3 part having oxygen index 56.5 vs. 28.0 for DOP instead of A.

L6 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1986:534652 HCAPLUS

DOCUMENT NUMBER: 105:134652

TITLE: Effect of intermolecular interactions on the physicomechanical properties of terpolymers of ethylene with vinyl esters of halogen-containing acids and vinyl alcohol

AUTHOR(S): Belov, M. Yu.; Novikov, S. N.; Bessonova, N. P.; Rogozhskina, E. D.; Izyumnikov, A. L.; Khutsishvili, V. G.; Bogachev, Yu. S.; Shapet'ko, N. N.; Godovskii, Yu. K.; Pravednikov, A. N.

CORPORATE SOURCE: Fiz.-Khim. Inst. im. Karpova, Moscow, USSR

SOURCE: Vysokomolekulyarnye Soedineniya, Seriya A (1986), 28(7), 1458-64

CODEN: VYSAAF; ISSN: 0507-5475

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Tensile strength and yield point of partially hydrolyzed ethylene-vinyl acetate copolymers containing .apprx.90 mol% ethylene units were increased by completing the hydrolysis and subsequent partial esterification with hexachloronorbornene-carbonyl chloride (I), chlorendic anhydride (II), tetrabromophthalic anhydride (III), tetrachlorophthalic anhydride (IV), isomethyltetrahydrophthalic anhydride (V), or phthalic anhydride (VI). The mech. properties of polymer esters improved in the order: Cl-containing ester of I < carboxyl group-containing esters of V and VI < carboxyl group- and halogen-containing esters of the remaining anhydrides, with increasing energy of intra- and intermol. interactions of the pendant polar groups in the amorphous phase of polymer esters, despite their decreased crystallinity. The interaction energy of carboxyl groups in polymer esters, studied on model monoiso-Pr esters of anhydrides, decreased in the order: VI > V = IV = III > II. The replacement of vinyl

acetate units with carboxyl group- and/or halogen-containing vinyl ester in partially hydrolyzed ethylene-vinyl acetate copolymers also increased their glass-transition temps. and the stiffness of chains. The improvements in mech. properties achieved by this replacement diminished on radiochem. crosslinking of the polymers.